# ILLINOIS COMMERCE COMMISSION DOCKET NO. 15-

**DIRECT TESTIMONY** 

**OF** 

**KEVIN GERHARDT** 

**Submitted on Behalf** 

of

AMEREN TRANSMISSION COMPANY
OF ILLINOIS

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1		ILLINOIS COMMERCE COMMISSION		
2		DOCKET NO. 15		
3		DIRECT TESTIMONY OF		
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6		AMEREN TRANSMISSION COMPANY OF ILLINOIS		
7	I.	INTRODUCTION AND WITNESS QUALIFICATIONS		
8	Q.	Please state your name, business address, and present position.		
9	A.	My name is Kevin James Gerhardt, and my business address is 1901 Chouteau Ave., St.		
10	Louis	s, Mo 63166. My present position is Project Manager in the Ameren Services Company		
11	(Ame	eren Services) Transmission Department.		
12	Q.	Please summarize your educational background and professional experience.		
13	<b>A.</b>	Please see my resume attached as an Appendix to this testimony.		
14	Q.	What are your duties and responsibilities in your present position?		
15	<b>A.</b>	Among other services, the Ameren Services Transmission Department designs,		
16	const	ructs, and operates electric transmission line projects on behalf of the Ameren Corporation		
17	(Ame	eren) subsidiaries, including Ameren Transmission Company of Illinois (ATXI) and		
18	Ame	ren Illinois Company. In my position as Project Manager, I am responsible for the planning,		
19	execution, completion and operational integration into Ameren's electric system of large-scale			
20	transmission construction projects. Currently, I manage the Illinois Rivers Project as well as			
21	transı	transmission line projects that integrate that project into the existing electric transmission system		

#### 22 II. **PURPOSE AND SCOPE** 23 Q. What is the purpose of this proceeding? 24 A. ATXI is requesting, in accordance with recent Commission directives, an order approving a modification to the route for the Pana to Mt. Zion segment of the Illinois Rivers 25 26 Project that avoids properties owned by the Macon County Conservation District (MCCD). A 27 route for the Illinois Rivers Project was originally approved by the Commission in Docket 12-28 0598. The modification will relocate a small segment of the route between Pana and Mt. Zion 29 segment to avoid properties owned by the MCCD, since ATXI cannot acquire rights to construct 30 the Project across these properties. 31 What is the purpose of your direct testimony? Q. 32 A. As the Project Manager for the Illinois Rivers Project, the purpose of my testimony is to 33 provide an overview of the modified route, explaining how the modified route was selected and the costs associated with constructing the route. ATXI witness Mr. Rick Trelz provides further 34 35 discussion of real estate matters in support of ATXI's request. 36 Q. Are you sponsoring any exhibits with your direct testimony? 37 A. Yes. I am sponsoring the following exhibits: 38 ATXI Exhibit 1.1 – Maps depicting the route between Pana and Mt. Zion that the 39 Commission approved in Docket 12-0598 and the modified route ATXI is 40 proposing in this case: and 41 ATXI Exhibit 1.2 – List of the utilities to which ATXI mailed notice of this filing.

#### 42 III. BACKGROUND OF THE ILLINOIS RIVERS PROJECT

- 43 Q. What is ATXI?
- 44 A. ATXI is an Illinois public utility dedicated to electric transmission infrastructure
- 45 investment, and a transmission-owning member of the Midcontinent Independent Transmission
- 46 System Operator, Inc. (MISO). The Commission granted ATXI certificates of public
- 47 convenience and necessity to construct transmission projects in Illinois in Dockets 06-0179, 06-
- 48 0706, and, most recently, in Docket 12-0598.

#### 49 Q. What is the Illinois Rivers Project?

- 50 A. The Illinois Rivers Project is a new 345 kV electric transmission line that extends
- approximately 300 miles across southern Illinois, together with nine new or expanded
- 52 substations and six 345/138 kV transformers along the route. The Commission authorized and
- directed ATXI to construct, operate, and maintain the Illinois Rivers Project in Docket 12-0598,
- and found that the Illinois Rivers Project is necessary to provide adequate, reliable, and efficient
- electric service, including the reliable delivery of renewable energy, to ATXI area customers.
- The Commission also found that the Illinois Rivers Project will promote the development of an
- effectively competitive electricity market that operates efficiently and is equitable to all
- customers, will provide local reliability benefits to certain portions of Illinois, and that it is the
- least-cost means of satisfying those objectives.

#### 60 Q. What part of the Illinois Rivers Project is at issue here?

- 61 A. This proceeding concerns only a limited portion of one segment of the Illinois Rivers
- 62 Project connecting a substation in Pana to a substation in Mt. Zion. The route the Commission
- approved for this segment of the Project runs north from Pana along or near Highway 51, and

- turns east towards the new substation location south of the Village of Mt. Zion. Just before this
- 65 route turns east, Highway 51 passes between or near several parcels of land owned by the
- MCCD. In this proceeding, ATXI seeks to modify the route of the Pana to Mt. Zion segment
- with respect to the area in the immediate vicinity of the MCCD parcels, in order to avoid locating
- the transmission line on land owned by the MCCD.

#### 69 IV. NEED FOR THE ROUTE MODIFICATION

- 70 Q. Why does ATXI need to modify the transmission line route to avoid the MCCD?
- 71 **A.** ATXI has not been able to reach a voluntary agreement with MCCD for the land rights it
- needs to construct the Project along the route the Commission approved in Docket 12-0598.
- 73 ATXI cannot condemn the MCCD property, so ATXI must modify the route to avoid the MCCD
- 74 property altogether.
- 75 Q. When the Commission chose a route between Pana and Mt. Zion in Docket 12-0598,
- 76 was it aware of the potential issue posed by the location of the MCCD parcels?
- 77 A. Yes. In Docket 12-0598, the Commission acknowledged that the route it approved
- 78 between Pana and Mt. Zion crossed the MCCD properties, and that this situation might present
- an "obstacle" to construction of the approved route. The Commission instructed ATXI to "work
- 80 to address" the issue, and stated, "if need be, the Commission will entertain requests for a revised
- route under Section 8-406 to avoid the MCCD land." Ameren Transmission Co. of Ill., Docket
- 82 12-0598, Second Order on Reh'g at 49-50 (Feb. 20, 2014).
- 83 Q. Did ATXI work to address the issue?

- 84 A. Yes. ATXI engaged in discussions with the MCCD, as discussed further by Mr. Trelz,
- but was not successful in reaching an agreement that would allow the transmission line to cross
- the MCCD property. Therefore, ATXI developed the modified route described below. The
- 87 Commission has directed ATXI to seek approval for this modification. *Ameren Transmission*
- 88 Co. of Ill., Docket 14-0551, Order on Reh'g at 6 (Dec. 10, 2014); Ameren Transmission Co. of
- 89 *Ill.*, Docket 14-0522, Order on Reh'g at 6 (Dec. 10, 2014).
- 90 Q. Is the modified route necessary to realize the benefits of the Illinois River Project?
- 91 A. Yes. ATXI cannot construct the Project along the route between Pana and Mt. Zion that
- was approved by the Commission in Docket 12-0598 because ATXI cannot obtain land rights
- that would allow the transmission line to cross the MCCD parcels. But this portion of the Project
- must be constructed. As the Commission recognized in Dockets 12-0598, 14-0511, and 14-
- 95 0522, without the connection between Pana and Mt. Zion, the Decatur area near Mt. Zion faces
- 96 reliability risks beginning in 2016. In addition, this portion of the Project is necessary to provide
- 97 the benefits of adequate, reliable, and efficient electric service, including the reliable delivery of
- 98 renewable energy, and the development of an effectively competitive electricity market that
- operates efficiently and is equitable to all customers. Thus, the route between Pana and Mt. Zion
- must be modified.
- 101 Q. Does the modified route impact or alter the need for the Illinois Rivers Project?
- 102 A. No. In Docket 12-0598, the Commission found that the Project is necessary to address
- transmission and reliability needs in an efficient and equitable manner and will benefit the
- development of an effectively competitive electricity market that operates efficiently and is
- equitable to all customers. The modified route deviates only slightly from the route the

106 Commission approved in Docket 12-0598, and the amendment has no impact on the reliability 107 need for the Project or the benefits of competitive, efficient and equitable electricity markets.

#### Q. Does ATXI have the managerial capability to construct the modified route?

A. Yes. In Docket 12-0598, the Commission concluded that ATXI is capable of efficiently managing and supervising the construction process for the entire Illinois Rivers Project. The modified route affects only a small portion of one segment of the Illinois Rivers Project. ATXI, through Ameren Services, is capable of efficiently managing and supervising the construction of the modified route, and has taken sufficient action to ensure adequate and efficient construction and supervision of the construction. Furthermore, amending this small portion of the route between Pana and Mt. Zion will not impact ATXI's capability to manage, supervise or finance the Project as a whole.

#### 117 Does ATXI have the financial capability to construct the modified route? Q.

- A. Yes. In Docket 12-0598, the Commission determined that ATXI is capable of financing the construction of the entire Illinois Rivers Project without adverse financial consequences for 120 ATXI or its customers. ATXI is capable of financing the construction of the modified route without significant adverse financial consequences for ATXI or its customers. Amending this small portion of the route between Pana and Mt. Zion will not impact ATXI's ability to finance the Project as a whole.
- 124 Does the modified route remain the least-cost route option from Pana to Mt. Zion? Q.
- 125 Yes, for the reasons discussed below. A.

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#### 126 V. **DESCRIPTION OF THE MODIFIED ROUTE** 127 Q. Please describe the modified route. 128 A. ATXI Exhibit 1.1 depicts both the route between Pana and Mt. Zion that the Commission 129 approved in Docket 12-0598 and the modified route ATXI is proposing in this case. The 130 modified route differs from the route approved in Docket 12-0598 because the modified route 131 turns east towards Mt. Zion one-half mile further south than the approved route, runs east 132 approximately one mile, and then turns north approximately one-half mile to rejoin the approved 133 route, instead of running north approximately one-half mile across the MCCD property before 134 turning to the east. 135 What is the total length of the modified portion of the route? Q. The right-of-way for the modified portion of the route is approximately 1.5 miles long. 136 A. 137 How wide must the easement be for the modified route? Q. 138 A. As with the Project as a whole, the easement for the modified route must be 150 feet wide 139 to provide adequate clearance from the transmission line conductor to the edge of the right-of-140 way. ATXI has already acquired all easements and other necessary land rights necessary to 141 construct the modified route. ATXI witness Mr. Rick Trelz discusses the necessary land rights 142 in more detail. 143 Q. What structures will ATXI use to construct the transmission line on the modified 144 route? 145 ATXI will use self-supporting single-shaft steel poles and corner or angle structures A. 146 designed to support 345 kV circuits. These structures were selected because they do not require

permanent guy wires, and therefore minimize the impact on agricultural land. Each of these structures will be approximately 110-120 feet tall. These structures will align with industry-wide standards. The modified portion of the route will not require any above-ground fixtures other than the poles, angle structures, and circuits.

#### VI. SELECTION OF THE MODIFIED ROUTE

- 152 Q. How did ATXI identify the modified route?
- A. ATXI analyzed the area in immediate proximity to the MCCD parcels with the goal of avoiding the MCCD property while minimizing any deviations from the route approved in Docket 12-0598. ATXI evaluated potential impacts to residences and non-residential structures, as well as to agricultural land and field and section lines. ATXI also considered engineering requirements and cost. ATXI then engaged in discussion with landowners in immediate
- 159 Q. Why did ATXI only consider the area in immediate proximity to the MCCD

proximity to the MCCD properties and considered their feedback.

160 properties?

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- 161 **A.** In Docket 12-0598, the Commission carefully evaluated the options presented for the
  162 route between Pana and Mt. Zion, and selected the least-cost route. ATXI considered only the
  163 limited area in immediate proximity to the MCCD parcels so that the modification would remain
  164 as consistent as possible with the Commission's evaluation and determinations in Docket 12165 0598.
- 166 Q. Did ATXI consider any other alternative routes to avoid the MCCD parcels?

- A. Because the proposed modified route is the shortest option and deviates the least from the route approved in Docket 12-0598, while avoiding the MCCD property, ATXI did not evaluate other, longer route options. Also, as Mr. Trelz discusses, all landowners affected by this
- modification were willing to engage in good faith negotiations.
- 171 Q. After ATXI identified the modified route, what did the Company do next?
- 172 A. ATXI engaged in negotiations with each of the landowners that will be affected by the
- modified route. Each of the four affected landowners along the modified route has entered into a
- voluntary easement agreement with ATXI. Mr. Rick Trelz discusses the negotiations with these
- landowners in more detail.
- 176 VII. LEAST-COST MEANS
- 177 Q. Is the modified route the least-cost means of avoiding the MCCD property?
- 178 A. Yes. The modified route is the least-cost means of avoiding the MCCD property, and the
- Pana to Mt. Zion route, as modified, remains the least-cost means of connecting Pana to Mt.
- 180 Zion.
- 181 Q. How did the Commission determine the route it approved in Docket 12-0598 was the
- least-cost route between Pana and Mt. Zion?
- 183 A. The Commission evaluated four routes between Pana and Mt. Zion using twelve routing
- criteria to select a route with the least environmental, social, and dollar costs. The Commission
- selected a route that runs north from Pana along Highway 51, and then turns east towards Mt.
- 186 Zion.

187 Q. Does the modified route differ materially from the route the Commission approved 188 in Docket 12-0598? 189 A. No. The modified route deviates only slightly from the route the Commission approved 190 in Docket 12-0598. The modified route is virtually identical in length to the route the 191 Commission approved in Docket 12-0598. 192 Q. Is the modified route superior to the Commission approved route in any way? 193 Yes. While the route approved in Docket 12-0598 required easements across property Α. 194 owned by seven landowners, the modified route requires easements across only four landowners' 195 property. 196 Q. Is there a difference in cost between the route the Commission approved in Docket 197 12-0598 and the modified route? 198 Yes. ATXI estimates that the modified route will cost approximately \$600,000 more Α. 199 than the route approved in Docket 12-0598. This is a difference of less than one percent of the 200 total estimated cost for the route between Pana and Mt. Zion. During Docket 12-0598, parties 201 provided the Commission with cost information for four alternative routes. Of these four routes, the "Blended Route" had the lowest estimated baseline cost of \$59,853,000. The estimated 202 203 baseline cost for the route the Commission approved, including the modification near the MCCD 204 parcels, is approximately \$58,300,000, which is approximately \$1,533,000 less than the

estimated baseline cost of the Blended Route. So, the modified route is approximately

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<sup>&</sup>lt;sup>1</sup> The Blended Route combined ATXI's Primary Route with Staff's substation Option #2 in Mt. Zion. The Commission rejected the Blended Route in favor of a route following Highway 51, and turning east along a route proposed by Staff.

206 \$1,533,000 less costly than any of the routes for which cost information was provided in Docket 207 12-0598. 208 Why will the modified route cost more to construct than the route the Commission Q. 209 approved in Docket 12-0598? 210 A. In comparison to the route the Commission approved in Docket 12-0598, the modified 211 route uses two additional 90-degree angle structures to avoid the MCCD parcels. The 212 procurement, design and installation of those structures are the primary drivers of the additional 213 cost. 214 0. Would selection of a materially different route to avoid the MCCD property 215 increase costs? 216 Yes. ATXI has already spent approximately \$65,000 in aerial survey costs and \$250,000 Α. 217 in line design costs related to the route between Pana and Mt. Zion. In addition, ATXI has spent 218 approximately \$595,000 in acquiring real estate to accommodate the modified route. ATXI 219 would be required to incur new and additional costs if a route that is substantially different from 220 the modified route is selected as a result of this proceeding. 221 VIII. MANAGEMENT, SUPERVISION AND SCHEDULE OF CONSTRUCTION 222 How will ATXI manage construction of the modified route? Q. 223 A. ATXI is utilizing, and will continue to utilize, an Ameren Services Project Management 224 Team to manage the design, construction and operation of the Illinois Rivers Project on ATXI's 225 behalf. This Team is responsible for managing the construction of the modified route, as part of 226 its responsibility for management of the Project as a whole.

- Q. What is the planned in-service date for the Pana to Mt. Zion segment of the Project?
- 228 A. The Pana to Mt. Zion segment of the Project is scheduled to be in-service by the end of
- 229 2016.
- Q. What are the consequences of delaying this in-service date?
- 231 A. The Commission has recognized that the Pana to Mt. Zion segment of the Project is
- 232 necessary to address reliability issues that will arise in the Decatur area in 2016. Any delay in
- 233 the in-service date for this segment of the Project may increase the risk of voltage collapse for
- the Decatur area.
- 235 O. Has ATXI developed a construction schedule that will accommodate the modified
- route and the planned in-service date for the Pana to Mt. Zion segment of the Illinois
- 237 Rivers Project?
- 238 A. Yes, the construction schedule for the modified route is the same as the construction
- schedule for the route approved in Docket 12-0598.
- 240 IX. REGULATORY COMMITMENTS
- Q. Will ATXI construct, operate, and maintain the Project and the modified route in
- compliance with Part 305 of the Commission's Rules of Practice?
- 243 A. Yes, ATXI will construct, operate, and maintain the Project and the modified route in
- compliance with Part 305 of the Commission's Rules of Practice.

245	Q.	Has ATXI notified other utilities that own facilities located within 200 feet of the	
246	modified portion of the Pana to Mt. Zion segment about the modified route?		
247	A.	Yes. ATXI mailed notice of the filing of the Petition in this case to each utility owning	
248	or operating railroad, electric supply and communication lines along the modified portion of the		
249	route between Pana and Mt. Zion. ATXI Exhibit 1.2 is a list of the utilities to which ATXI		
250	mailed notice.		
251	Q.	Will ATXI comply with all other applicable rules and requirements regarding	
252	construction, operation, and maintenance of the modified route?		
253	A.	Yes, ATXI will comply with all applicable rules and requirements regarding	
254	construction, operation, and maintenance of the modified route, including Parts 300 and 305 of		
255	the Commission's Rules of Practice and Procedure and the Illinois Department of Agriculture's		
256	rules related to the Illinois Farmland Preservation Act. ATXI witness Rick Trelz addresses real		
257	estate matters related to the modified route.		
258	Q.	Has ATXI assessed the historical, environmental, and other potential impacts of the	
259	modified route?		
260	A.	Yes. ATXI has completed environmental desktop studies of the modified route, and will	
261	conduct field reviews prior to construction.		
262	Q.	Will the modified route require ATXI to obtain any necessary highway or railroad	
263	crossing permits from the Illinois Department of Transportation prior to construction?		
264	<b>A.</b>	No.	

- Q. Will ATXI obtain all other necessary environmental permits, including all river,
- stream, and lake crossing permits, from the U.S. Army Corps of Engineers prior to
- 267 construction of the modified route?
- 268 A. Yes, environmental permits will be secured once field studies are completed. U.S. Army
- 269 Corp of Engineers permits are not required for the modified route.
- 270 X. CONCLUSION
- 271 Q. Does this conclude your direct testimony?
- 272 **A.** Yes, it does.

APPENDIX
WITNESS
STATEMENT OF QUALIFICATIONS

## KEVIN J. GERHARDT, P.E., P.M.P.

ATXI - Appendix Page 1 of 3

Ameren Transmission 1901 Chouteau Ave St. Louis 63166 Phone 314-554-2720 E-mail kgerhardt@ameren.com

Professional Experience

2004 - Present

**Ameren (Formerly Union Electric)** 

St. Louis, MO

#### Project Manager; Ameren Transmission (2013-Present)

- Project Manager for Illinois Rivers Program Transmission Lines
  - Herleman-Maywood Transmission Line Segment
  - Meredosia-Herleman Transmission Line Segment
  - Meredosia-Ipava Transmission Line Segment
  - Meredosia-Austin Transmission Line Segment
  - Austin-Pana Transmission Line Segment
  - Pana-Faraday Transmission Line Segment
  - Faraday-Kansas Transmission Line Segment
  - Kansas-Sugar Creek Transmission Line Segment
  - Faraday-PPG Transmission Line

#### Project Engineer; Dam Safety & Hydro Engineering (2005-2013)

- Project Manager for Major Fossil Fuel Power Plants
  - Labadie Utility Waste Landfill
  - Sioux Dry Cell Utility Waste Landfill Expansion
  - Meramec Utility Waste Landfill on a Pond
  - Rush Island Utility Waste Landfill on a Pond
- Project Manager for Major Hydro Projects
  - Security Upgrades, Taum Sauk Plant
  - Upper Reservoir Rebuild Support, Taum Sauk Plant
  - Penstock Repair, Taum Sauk Plant
  - New Administration Building, Taum Sauk Plant
  - Fish Barrier Net Installation, Osage Plant
  - Spillway Apron Installation, Keokuk Plant

#### Project Engineer; Civil, Structural (2004-2005)

- Industrial Structural Design for Fossil Fuel Power Plants
  - Access Platforms, Equipment Supports, Monorails
  - Building Additions
- Hydroelectric Project Work
  - Annual Dam Structural Inspections & Analyses
    - Study Coordination
  - Dam Rehabilitation & Improvement Projects
- Responsible for Budget/Cost Control, Management of All Design Consultants, Construction Bidding & Selection, Permitting, Invoicing, Upper Management Reporting and Product Selection
- Major Projects (Overall Responsible Lead Engineer on):
  - Boiler Maintenance Work Platforms, Labadie & Rush Island Plants
  - Coal Reclaim Chute Replacement, Labadie Plant
  - Coal Receiving Chute Replacement, Rush Island Plant

# APPENDIX WITNESS STATEMENT OF QUALIFICATIONS

ATXI - Appendix Page 2 of 3

### 2004 Metropolitan Engineering and Surveying Barnhart, MO

- **Civil Engineer**
- Surveying, Total Station Work
- Site Layout, Grading
- Sanitary & Storm Sewer Design
- Retaining Wall Design

## 2003 Missouri Department of Transportation Rolla, MO Construction Inspector/Field Surveyor

- Compaction Testing
- Concrete Testing
- Soil Testing
- Project field surveying
- Construction Supervision

2002 Ameren St. Louis, MO

Civil Engineer - Co-op

Structural Design

Professional Memberships Missouri P.E.

Project Management Professional (PMP)

Project Management Institute Member

**ASDSO Member** 

Order of the Engineer Member

**ASCE Member** 

**USSD Member** 

Education 2000 - 2003 University of Missouri-Rolla Rolla, MO

B.S. Civil Engineering

1998 - 2000 Jefferson College Hillsboro, MO

Pre-Engineering

Community Activities Hope Lutheran Church, Member

APPENDIX
WITNESS
STATEMENT OF QUALIFICATIONS

ATXI - Appendix Page 3 of 3

Seminars, Professional Publications, & Awards Project Management Professional (PMP) Boot Camp

Project Unfreeze

Model-Netics Management Training – 2005

OSHA 30 Hour Certification - 29CFR1910 - 2004

OSHA 10 Hour - 2013

Seven Habits of Highly Effective People

St. Louis Council of Construction Consumers' Best Practices Award

Silver Eagle Award

Generation Engineering "Game Ball"